

A Survey of Fertility and Family Planning in Atlanta, Georgia

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A SURVEY OF FERTILITY AND FAMILY PLANNING conducted among women of Atlanta, Ga., in 1971 showed several areas where family planning services were needed. It revealed that almost half of the pregnancies since 1966 had not been wanted and that women not practicing contraception accounted for more than two-thirds of them. The Metropolitan Atlanta Council for Health (a group of health service agencies) had been helping to provide and evaluate family planning services for women in the area in cooperation with the Center for Disease Control (CDC), Public Health Service, and CDC had established and implemented a computerized data system for these services (1). By 1971, however, officials of the health agencies had come to feel that they needed more detailed information about the general population of women in Atlanta so that they could make a better communitywide evaluation of family planning needs. The subjects suggested for study included the extent of contraceptive use by women of child-bearing age, the proportion of family planning services in the city that these agencies provided, the degree of unmet need for such services, fertility levels, and women's attitudes about their past and future fertility. The 1971 survey was conducted to gather such information.

Several facets of the Atlanta Fertility Survey permitted us to collect unique and valuable data. First, the fact that the sample was drawn from the "urban area" of Atlanta meant that a significant proportion of the women interviewed would be black without double sampling. This is in contrast to most of the other major fertility surveys, which either have excluded blacks, for example, the Princeton Study (2), or have included a substantial proportion of blacks only in their more recent samples (3). Second, the fact that no marital restriction was put on the eligibility of a woman to be in the sample meant that information could be gathered on both never married

and previously married women. Again, the major surveys have focused on currently married women who were living with their spouses (2,3) and have only recently included ever married women (National Fertility Study), or they have dealt exclusively with teenagers (4). Third, the geographic location of the survey in a large southern metropolitan area gave the data another unique aspect. Finally, the design and successful implementation of the survey could help other groups, such as local health departments, conduct such a survey in their own areas (5). The survey was also justified on the theoretical grounds that since it includes population not in the national surveys, this survey expands available empirical data.

Methods

The survey was restricted to women 15 through 44 years. No marital restrictions were placed on the sample since, for example, it was already known that as of the end of 1968, more than 50 percent of the women actively enrolled in the family planning program at Atlanta's large municipal hospital had never been married or were separated, widowed, or divorced (6). Therefore, to limit the sample to married women living with their spouses, as was done in most previous major fertility surveys, would have been to ignore a large group of Atlanta women using or in need of family planning services.

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The locale chosen for the survey was roughly equivalent to that designated in the U.S. Census as the "Atlanta urban area." The census tracts in the survey area were ranked socioeconomically by a modification of a process devised by Serfling and Sherman (7). After being ranked, these tracts were divided into four socioeconomic areas, so that roughly one-fourth of the total population in the survey area was in each stratum. Next, an area probability sample of 1,914 randomly selected households was chosen, so as to yield an expected total of roughly 1,200 women of childbearing age to be interviewed.

Each woman was initially interviewed in person by a physician or other health official using a questionnaire that dealt with fertility, contraceptive use, and attitudes about past and possible future pregnancies. To increase the number of interviews that could be done in the time available and to insure the respondent's cooperation, the questionnaire was kept short. A one-page household information form was first used to identify the women aged 15-44 living in each randomly chosen housing unit. Each of the women thus identified was then asked to respond to the questionnaire. Depending on the woman's history of fertility and contraceptive use, the entire interview could be completed in 15 minutes or less. Any necessary callbacks (up to three for each interview) were made by professional interviewers hired for this purpose.

A total of 1,016 interviews with women aged 15-44 were completed: 616 women (60.6 percent) were white and 400 (39.4 percent) black. (No women of other races lived in the households from which the sample was drawn.) The following table shows the distribution of the women by age group and race.

<i>Age group</i>	<i>Total</i>	<i>White</i>	<i>Black</i>
Total	1,016	616	400
15-19	207	116	91
20-24	184	112	72
25-29	170	110	60
30-34	156	92	64
35-39	155	96	59
40-44	134	81	53
Unknown	10	9	1

The interview completion rate was 91.8 percent. Only 4.0 percent of the eligible women refused to be interviewed, and an additional 4.2 percent could not be contacted after three attempts. Completion rates ranged from 88.7 percent for those living in the upper socioeconomic area to 95.4 percent in the upper middle; the upper area had the highest refusal rate (7.6 percent), while the upper middle and lower areas had the lowest (2.2 percent).

Of the 1,016 women, 62.2 percent were married at the time of the survey, 29.6 percent had never been married, 7.8 percent had previously been married but were widowed or divorced at the time of the survey, and 0.4 percent did not tell the interviewer their marital status. The women were not asked about their marital status until the end of the interview so that unmarried women could talk more freely about their fertility and use of contraception. We did not ask whether a woman who had never been married was living with a man in some sort of relatively permanent relationship.

The mean age for the never married women in the sample was 20.1 years; for the previously married, 34.4 years; and for the currently married, 31.6 years. The mean age of all the women in the sample was 28.3 years, 28.4 years for whites and 28.0 years for blacks.

Results and Discussion

Blacks and whites differed rather substantially in their responses to many questions in the survey.

Fertility and contraception. Women who had ever been pregnant comprised 68.8 percent of the survey sample (65.6 percent of the whites and 73.7 percent of the blacks). By age, striking differences were seen in the proportions of blacks and whites who had ever been pregnant. As table 1 shows, blacks had roughly seven times as high a proportion in the 15-19 year age group, and a large difference still existed in the 20-24-year age group (70.8 percent of blacks versus 48.6 percent of whites). At ages 25-29, the proportions were closer (90 percent of blacks and 79.1 percent of whites), and from age 30 up, roughly 90 percent or more of all women had been pregnant (except blacks aged 40-44).

Of both races combined, 58.9 percent had been pregnant one to five times between January 1966 and the interview: 65.5 percent of these women had only one pregnancy in the period; 24.5 percent had two; 8.3 percent had three; 1.2 percent had four; and 0.5 percent (two women) had five. There was virtually no difference by race in the proportionate number of pregnancies.

As expected, pregnancy was closely linked to marital status (table 1). Approximately the same proportion of the total ever married women of both races had been or were pregnant. In the 15-19-year and 20-24-year age categories, however, a much higher proportion of ever married black women than of white had been or were pregnant. For never married women, the overall pregnancy rate for blacks

Table 1. Women ever pregnant, by marital status, race, and age group, Atlanta, Ga., 1971

Marital status and race	Percentage of age group ever pregnant						Total	Number in sample ever pregnant
	15-19	20-24	25-29	30-34	35-39	40-44		
All women	18.4	57.4	82.9	91.0	93.5	90.3	68.8	688
White	5.2	48.6	79.1	92.4	92.6	95.1	65.6	395
Black	35.2	70.8	90.0	89.1	94.9	83.0	73.7	293
Ever married	72.7	77.7	89.7	93.9	95.9	92.1	89.9	629
White	55.6	68.9	88.7	95.5	96.6	96.2	89.0	387
Black	84.6	94.7	91.8	91.5	94.7	85.7	91.3	242
Never married	11.5	25.4	39.1	37.5	55.6	50.0	19.7	59
White	0.9	8.1	37.5	12.5	4.8	8
Black	26.0	44.1	81.8	60.0	100.0	50.0	38.3	51

Table 2. Women ever using contraception, by marital status, race, and age group, Atlanta, Ga., 1971

Marital status and race	Percentage of age group ever contracepting						Total	Number in sample ever contracepting
	15-19	20-24	25-29	30-34	35-39	40-44		
All women	23.3	66.1	82.2	78.8	76.5	60.2	62.8	625
White	12.9	68.8	83.5	82.6	78.1	72.5	64.8	390
Black	36.7	62.0	80.0	73.4	73.7	41.5	59.7	235
Ever married	63.6	89.3	87.6	81.1	78.5	61.9	79.2	552
White	55.6	92.0	91.7	85.4	79.8	72.7	83.9	365
Black	69.2	83.8	79.6	74.6	76.4	44.9	71.4	187
Never married	18.1	29.6	47.8	37.5	44.4	16.7	24.4	73
White	9.4	21.6	16.7	...	57.1	50.0	15.0	25
Black	30.3	38.2	81.8	60.0	36.4	48

Table 3. Women ever pregnant or ever using contraception, by marital status, race, and age group, Atlanta, Ga., 1971

Marital status and race	Percentage of age group ever pregnant or ever contracepting						Total	Number in sample ever pregnant or ever contracepting
	15-19	20-24	25-29	30-34	35-39	40-44		
All women	27.3	74.5	91.1	95.5	94.8	91.0	76.2	764
White	14.8	73.2	89.0	96.7	94.8	95.0	74.8	452
Black	43.3	76.4	95.0	93.8	94.9	84.9	78.4	312
Ever married	81.8	98.2	96.6	98.0	96.6	92.9	96.0	674
White	78.8	97.3	97.9	100.0	97.8	96.2	97.5	426
Black	84.6	100.0	93.9	94.9	94.7	87.8	93.6	248
Never married	20.8	36.6	56.5	50.0	66.7	50.0	30.0	90
White	9.4	24.3	16.7	...	57.1	50.0	15.6	26
Black	36.4	50.0	100.0	80.0	100.0	50.0	48.1	64

was about eight times that for whites. These data on the never married should be viewed with care, however (especially those for whites), since only 8 never married whites and 51 never married blacks said they had ever been pregnant.

Of all women interviewed, 62.8 percent had used or were using contraception (table 2). The proportion of blacks in the 15–19-year age group who had ever used contraception was three times greater than the proportion of whites, but the proportion of blacks was lower both overall and in each of the other age groups.

Like pregnancy, contraceptive use was closely linked to marital status. Of the ever married women, 79.2 percent had ever used contraception; of the never married, 24.4 percent. Among the ever married, a higher proportion of whites had used contraception (83.9 percent versus 71.4 percent). This racial difference was found in every age group of the ever married except the youngest, in which 69.2 percent of the blacks and 55.6 percent of the whites practiced contraception. In contrast, among the never married women, blacks had more than twice as high a usage rate (36.4 percent) as whites (15.0 percent). It should be noted, however, that data on the never married are based on only 25 white and 48 black contraceptive users.

In table 3, the data in tables 1 and 2 are combined to show the women who have ever been pregnant, who have ever used contraception, or both. We see that virtually all ever married women 20 years or older have been pregnant or used contraception, with little difference by race. Among the never married, 15.6 percent of the white women and 48.1 percent of the black have been pregnant or used contraception, or both.

In addition to inquiring about past contraception and pregnancy, we asked the women if they had used contraception or had been pregnant between January 1966 and the date of the survey. (Although we would have preferred a complete fertility and contraceptive history, considerations of time and accuracy led us to select this 6-year interval for more intensive questioning.) Of those who had ever used contraception, 88.1 percent had used it within the period 1966–1971, while 58.9 percent of those who had ever been pregnant had been so within that period.

The final time reference in the survey was the date of the interview. Of all women in the sample, 36.5 percent were practicing contraception at the time of the survey, 2.3 percent had husbands who had undergone vasectomies, and 2.8 percent were pregnant at the time.

Types and sources of contraception. All women who had practiced contraception at any time since January 1966 were asked to name each method used and the source of the contraceptive (if applicable). Table 4 shows that of all the methods reported, the pill was by far most commonly mentioned, being named 49.3 percent of the time. Next most common was foam, then the intrauterine device (IUD), the condom, the diaphragm, and rhythm, in that order. Some women reported using “other” types of contraception, or else they reported using contraception, but did not specify the methods. Compared with whites, blacks were slightly more likely to have used the pill, were considerably more likely to have used the IUD, were less likely to have used condoms, rhythm, or diaphragms, and were about equally likely to have used foam.

Table 4. Percentage distribution of contraceptive methods among women practicing contraception, by period of use and race, Atlanta, Ga., 1971

Method	Women using contraception 1966–71			Women using contraception at time of survey		
	Total (N=877)	White (N=582)	Black (N=295)	Total (N=371)	White (N=242)	Black (N=129)
Pill	49.3	47.4	52.9	50.1	48.8	52.7
IUD (intrauterine device)	12.1	8.8	18.6	16.4	13.6	21.7
Condom	10.5	13.1	5.4	11.3	14.1	6.2
Foam	14.9	15.5	13.9	10.0	10.7	8.5
Diaphragm	5.9	7.6	2.7	5.4	7.0	2.3
Rhythm	3.7	5.1	0.7	2.2	2.9	0.8
Other	3.3	2.4	5.1	3.8	2.1	7.0
Unknown	0.3	0.2	0.7	0.8	0.8	0.8

When contraceptive methods in use at the time of the survey are considered, one sees from table 4 that there were some changes over time. The frequency of IUD use rose to second place, while foam dropped to fourth. The proportionate use of condoms increased slightly, while the proportionate use of rhythm decreased. Whites continued to be more likely to use the condom, the diaphragm, and rhythm, while blacks were more likely to use pills, the IUD, and "other" methods.

A comparison of the data on currently used contraceptive methods (for married couples) from the 1970 National Fertility Study with the Atlanta survey results shows that a higher proportion of all Atlanta women surveyed were using the pill (50.1 percent) than of women nationwide (34.2 percent) and that 21.7 percent of the black Atlanta women surveyed were using the IUD versus only 7.6 percent of the black women nationwide (8).

None of the husbands of the black Atlanta women had had vasectomies, but 25 of the husbands of the white Atlanta women had (or 6.0 percent of the currently married white couples). Besides being race specific, vasectomies also seemed to be class specific, since 12 of the 25 were performed on residents from the upper socioeconomic area, 11 on residents from the upper-middle area, and 1 each on residents from the lower-middle and lower areas. Responses to a question as to whether the woman had ever been sterilized showed that 92 women (9.1 percent) had been. The distribution of sterilization among the women by race was 46 whites (7.5 percent) and 46 blacks (11.5 percent). Among currently married women only, 10.5 percent of whites, 17.2 percent of blacks, and 12.8 percent of both races combined had been sterilized.

The figures on sterilization from our survey can be compared with data from the 1970 National Fertility Survey, specifically those showing the degree of sterilization among currently married women (under 45 years) living with their spouses. For the South, the National Fertility Survey results indicated that among 12 percent of the white couples and 13 percent of the black, one partner had undergone a sterilizing operation (9). In Atlanta, we found somewhat higher figures: one partner among 16.5 percent of the currently married white couples and 17.2 percent of the black had had a sterilizing operation. In both study samples, few or no vasectomies were reported for blacks.

The sources of supply for the contraceptives used in the various methods mentioned by the women were of interest to the agencies participating in the metro-

politan family planning program. A tabulation of the sources of the contraceptives needed for the methods in use during the period 1966-71 showed that private physicians provided those for a majority of the methods (53.7 percent). Drugstores provided contraceptives for the nonprescription methods (foam and condoms, for example) and were the second most common source of supply (21.3 percent) for contraceptives as a whole. Grady Hospital (the large municipal charity hospital that serves most of the city's medically indigent) was the third most common source (15.1 percent). Other sources included Atlanta Planned Parenthood (3.2 percent), the Fulton County Health Department (1.5 percent), the Dekalb County Health Department (0.7 percent), "other" (3.6 percent), and "unknown" (0.8 percent). By race, there was a considerable difference in sources. Private physicians provided 66.5 percent of the contraceptives for methods used by whites, but only 29.1 percent of those for methods used by blacks, while Grady Hospital provided supplies for only 2.1 percent of the methods used by whites but 40.1 percent of the supplies for methods used by blacks.

Following is the percentage distribution according to source of supply of the most commonly mentioned contraceptives used by Atlanta women at the time of the interview:

<i>Type of contraceptive and source</i>	<i>Percentage of type</i>
<i>Pills</i>	
Private physicians	76.6
Grady Hospital	12.0
Planned Parenthood	7.4
<i>Diaphragm</i>	
Private physicians	80.0
Grady Hospital	15.0
Planned Parenthood	5.0
<i>IUDs</i>	
Private physicians	48.3
Grady Hospital	43.3
Planned Parenthood	6.7
<i>Condoms</i>	
Drugstores	92.9
<i>Foam</i>	
Drugstores	62.2

Overall, the agencies that were part of the coordinated Atlanta family planning system were providing contraceptive services for 24.6 percent of the methods in use at the time of the survey by the women who specified a contraceptive source. By race, these agencies were providing only 7.5 percent of the white women's contraceptives, but 56.7 percent of the black women's. Of the women who had used contraception at any time after January 1, 1966,

24.8 percent had gone to one of the Atlanta area family planning services agencies (Planned Parenthood, Grady Hospital, or one of the two county health departments) to obtain supplies for at least one of the methods they had used. By race, 7.1 percent of the white women who used contraception in the period and 54.3 percent of the blacks had gotten supplies for at least one of their methods from one of these agencies. When we look at the sources of contraceptives in use at the time of the survey, we find that 7.3 percent of the white women, 53.1 percent of the black, and 23.5 percent of the total women who were practicing contraception at the time of the survey received their contraceptive supplies from one of the agencies.

Parity—actual and desirable. For each pregnancy that occurred during the period of 1966–71, the woman was asked whether just before it, she had wanted to become pregnant. For 55.2 percent of the pregnancies, the women had wanted to become pregnant; for 43.8 percent they had not. Another 1.0 percent said they had not cared at the time whether they became pregnant or not. There was a considerable difference by race: 32.1 percent of the whites had not wanted to become pregnant and 1.5 percent had not cared, while 59.4 percent of the blacks had not wanted to become pregnant and 0.4 percent had not cared. It should be noted, however, that the question did not differentiate between timing and number failures.

A number of the women had not been married when they became pregnant. Therefore their inclusion in the total presumably raised the rates of unwanted pregnancies somewhat, since as a group, these women undoubtedly would have been less likely to want to become pregnant than a group of currently married women. When the never married and currently married are examined separately, we find that 20.4 percent of the pregnancies to the never married were wanted at the time of pregnancy, while 79.6 percent were not. These proportions were about the same for both whites and blacks. On the other hand, the currently married women had wanted 60.0 percent of their pregnancies at the time they occurred, had not wanted 38.8 percent, and had not cared in 1.2 percent of the instances. By race, currently married blacks had not wanted more than half (52.2 percent) of their pregnancies, while whites had not wanted 31.4 percent. (A more detailed analysis of unwanted fertility among married couples, based on data from the 1971 Atlanta survey of fertility and family planning, has been reported (10).)

About two-thirds (68 percent) of the total unwanted pregnancies were to women who had not been using contraception when their pregnancy occurred (56.6 percent of the whites and 76.6 percent of the blacks). The women who had experienced unwanted pregnancy were asked whether after each occurrence they “began using anything to keep from getting pregnant.” Whether or not these women had used contraception before, almost three-fourths (72.5 percent) of those who had had one or more unwanted pregnancies in the period had begun using contraception after the event in order to avoid another pregnancy. (In this instance, a few women who were sterilized or whose husbands had had a vasectomy after their wife’s pregnancy were considered to be users of contraception.) Whites were slightly more likely to have begun contraceptive use after an unwanted pregnancy than blacks (75.2 percent versus 70.4 percent).

Several questions were asked to determine the women’s attitudes toward fertility. All women were asked, “What do you think is the ideal number of children for the average American family?” The mean value for the question was 2.6 children. As table 5 shows, 91.8 percent of the answers fell in the two- to four-child range; 54.2 percent of the women chose exactly two. Blacks thought the ideal size was slightly higher (mean 3.0 children), while whites thought it was slightly lower (mean 2.3 children).

A nationwide Gallup poll of white women in November 1971 showed a different distribution of responses to the question on ideal family size than our survey showed for Atlanta whites. The major differences were in the proportions favoring two- and four-child families. In the Gallup poll, 43 percent wanted two children and 22 percent wanted four, while in the Atlanta survey 65 percent wanted two and only 8 percent wanted four (11).

Although the question about the “ideal average American family size” is found in virtually all fertility surveys, use of this question has recently been criticized on grounds that the response may not really reflect what the woman considers to be her own ideal, but rather tends to be a stereotype reply that is not valid as a long-term indicator of her desires or behavior (11). Another caveat with respect to fertility-attitude questions is that “Since virtually all women want at least two children, reports of desired family size prior to the achievement of this minimum may be selected more randomly from the range of ‘acceptable’ family size” (12). Even after the birth of the second child, only 41 percent of the women in the Princeton Study (the study which the

Table 5. Distribution per 1,000 women of measures of parity, by race, Atlanta, Ga., 1971

Race	Number of children ¹								
	Mean	0	1	2	3	4	5	6	7
Ideal average family									
All women	2.6	12	31	542	217	159	28	7	4
White	2.3	15	22	654	222	81	5	0	0
Black	3.0	8	45	368	210	277	63	18	11
Desired by the never pregnant									
All women	2.1	130	60	559	140	89	22	0	0
White	2.1	115	29	618	153	67	19	0	0
Black	2.0	162	124	448	114	124	29	0	0
Desired when first pregnant									
All women	2.6	43	107	459	155	164	16	37	19
White	2.8	30	57	480	183	164	13	57	16
Black	2.4	62	175	431	117	164	18	11	22
Desired if could start over									
All women	2.6	60	55	469	191	168	24	19	13
White	2.6	26	31	531	214	157	8	23	10
Black	2.5	106	88	385	159	184	46	14	18
Total expected									
All women	2.9	30	129	305	242	161	65	27	41
White	2.7	24	108	341	280	172	51	5	19
Black	3.1	38	160	255	190	144	84	57	72

¹ Any noninteger parity values given as responses, for example, "2 or 3," were alternately assigned to next higher and lower parities. Therefore, if one adds the number of women for all 8 parities, sum may not be 1,000 in all instances.

comment just quoted concerns) ended up with the precise number of children that they said they wanted when they were first interviewed, while 14 percent had two children more or fewer than they had originally desired (13). Nevertheless, even though the measurement of individual expectations may not be accurate, the measurement of group expectations has been found to be fairly close to what eventually happens (14).

The mean number of children desired by the women who had never been pregnant was 2.1. This lower mean is largely accounted for by the 13.0 percent who said they wanted to have no children (11.5 percent of the whites and 16.2 percent of the blacks), as is shown in table 5. The means by race are close (white mean 2.1 and black mean 2.0), although the responses of black women are more evenly distributed over the range of choices.

Most of the never pregnant women (88.9 percent) had an opinion about whether they would actually have the number of children they desired. Of those with an opinion, about two-thirds (62.3 percent) thought they would have the exact number they wanted, 18.1 percent thought they would have fewer, and 19.6 percent thought they would have more. White women were more confident of having their desired number than blacks were (66.3 percent versus 53.8 percent), while higher proportions of blacks than of whites expected to have more children (24.2 percent versus 17.4 percent) or less children (22.0 percent versus 16.3 percent) than they desired.

When ever pregnant women were asked how many children they had wanted just before their first pregnancy, the black mean response of 2.4 was lower than the white mean response of 2.8. The overall average was 2.6. Higher proportions of blacks (23.7

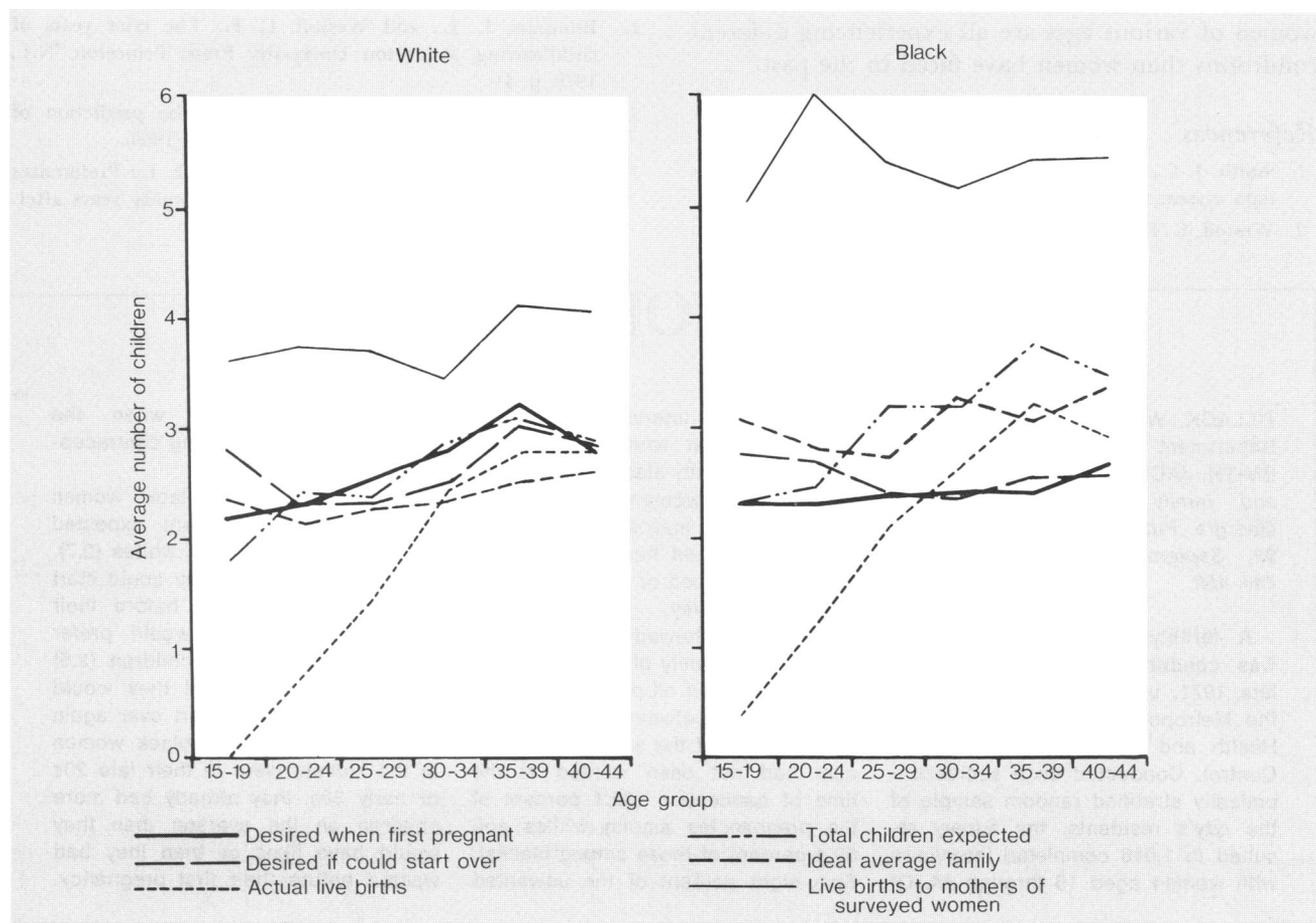
percent) than of whites (8.7 percent) said they had desired no child or one child, while a somewhat higher proportion of whites had wanted five or more children.

The black and white means were almost identical when ever pregnant women were asked how many children they would like to have by age 45 if they could start their life over again (2.6 for whites and 2.5 for blacks); the overall average was 2.6. The responses of whites were more concentrated in the two- to four-child range (90.2 percent) than were the responses of blacks (72.8 percent); more than half of the whites wanted exactly two children. A much higher proportion of the black women wanted no child or one child than of the white women (19.4 percent versus 5.7 percent), and a higher proportion of the black women wanted five or more children (7.8 percent versus 4.1 percent).

All ever pregnant women were asked how many more children they expected to have. Unfortunately,

the number of living children that they had at the time of the survey is not known, so that the total number expected has been calculated by adding the number of liveborn children to the additional number expected. This sum, of course, will overstate the total by whatever degree of infant and child mortality existed in the survey population. Bearing this in mind, we find that the overall average expected by women who had been pregnant was 2.9 children; whites expected 2.7 and blacks, 3.1. Figures for the number of children expected were much more evenly distributed by race than figures for the other questions (table 5), although the responses of whites were still more concentrated in the two- to four-child categories than those of blacks. It is also noteworthy that 21.3 percent of the ever pregnant black women expected five or more children, as compared with 7.5 percent of the ever pregnant white women. Incidentally, it is logically possible that some of these ever pregnant women expected no children, since the criterion for

Average values of parity measures by race and age group



asking how many more children a woman wanted was only that she had ever been pregnant, not that the pregnancy had resulted in a live birth.

The age of the woman being interviewed naturally could affect her responses to some questions. The declining fecundity of older women could affect responses, as could the obvious fact that older women have had more time to have children than younger women.

The interrelation of fertility values, both actual and subjective, is shown in the chart. The most noticeable feature is the higher fertility of the women's mothers as compared with the women themselves. Also noticeable is the smaller spread of the white averages for the various measures, as well as the somewhat lower averages for most measures for whites than for blacks. At the younger ages, black women, especially, expect fewer children and claim to desire more children than they do later in life. As age increases, the total number of children expected also increases, so that both the desired number and the ideal average number are surpassed. The differences by age imply two possibilities: either women's actual fertility or their attitudes about fertility, or both, may change as they grow older, or there may be a cohort effect, so that today women of various ages are all experiencing different conditions than women have faced in the past.

References

1. Smith, J. C., and Goldsby, J. B.: A family planning services data system. *Fam Plann Perspect* 2: 41-46 (1970).
2. Westoff, C. F., Potter, R. G., Sagi, P. C., and Mishler, E. G.:

Family growth in metropolitan America. Princeton University Press, Princeton, N.J., 1961.

3. Ryder, N. B., and Westoff, C. F.: *Reproduction in the United States, 1965*. Princeton University Press, Princeton, N.J., 1971, p. 8.
4. Kantner, J. F., and Zelnick, M.: Sexual experience of young unmarried women in the United States. *Fam Plann Perspect* 4: 9-18 (1972).
5. Smith, J. C.: Design, implementation and validation of a community fertility and family planning survey. Paper presented at American Public Health Association Centennial Meeting, Atlantic City, N.J., Nov. 12-17, 1972.
6. Tyler, C. W., Jr., Tillack, W. S., Smith, J. C., and Hatcher, R. A.; Assessment of a family planning program: Contraceptive services and fertility in Atlanta, Georgia. *Fam Plann Perspect* 2: 26 (1970).
7. Serfling, R. E., and Sherman, I. L.: Attribute sampling methods for local health departments. U.S. Government Printing Office, Washington, D.C., 1965, pp. 7-78.
8. Westoff, C. F.: The modernization of U.S. contraceptive practice. *Fam Plann Perspect* 4: 11 (1972).
9. Bumpass, L. L., and Presser, H. B.: Contraceptive sterilization in the U.S.: 1965 and 1970. *Demography* 9: 533 (1972).
10. Anderson, J. E., and Smith, J. C.: Planned and unplanned fertility in a metropolitan area: Black and white differences. *Fam Plann Perspect* 7: 6 (1975).
11. Blake, J.: Can we believe recent data on birth expectations in the United States? *Demography* 11: 26-27 (1974).
12. Bumpass, L. L., and Westoff, C. F.: The later years of childbearing. Princeton University Press, Princeton, N.J., 1970, p. 41.
13. Bumpass, L. L., and Westoff, C. F.: The prediction of completed fertility. *Demography* 6: 445 (1969).
14. Westoff, C. F., Mishler, E. G., and Kelly, E. L.: Preferences in size of family and eventual fertility twenty years after. *Am J Sociol* 62: 491-497 (1957).

SYNOPSIS

TILLACK, WARNER S. (Philadelphia Department of Public Health), and SMITH, JACK C.: *A survey of fertility and family planning in Atlanta, Georgia. Public Health Reports, Vol. 92, September-October 1977, pp. 444-452.*

A fertility-family planning survey was conducted in Atlanta, Ga., in late 1971, under the sponsorship of the Metropolitan Atlanta Council for Health and the Center for Disease Control. Conducted on a socioeconomically stratified random sample of the city's residents, the survey resulted in 1,016 completed interviews with women aged 15 through 44. Of

the completed interviews, 60.6 percent were with white women and 39.4 percent with black women; 29.6 percent of all women in the sample had never been married, and an additional 7.8 percent had been married but were divorced or widowed at the time of the survey.

The results showed several definite areas where family planning services were needed. Of all pregnancies that had occurred between January 1966 and the time of the survey, 43.8 percent had not been wanted at the time of conception (32.1 percent of the pregnancies among whites and 59.4 percent of those among blacks). Sixty-eight percent of the unwanted

pregnancies occurred when the woman was not practicing contraception.

On the average, black women who had been pregnant expected more children (3.1) than whites (2.7), but they said that if they could start their lives over again before their first pregnancy, they would prefer to have slightly fewer children (2.5) than white women said they would prefer if they could start over again (2.6). By the time the black women in the sample were in their late 20s or early 30s, they already had more children on the average than they would have liked or than they had wanted before their first pregnancy.